

APPENDIX A SEED MIXTURES

Table A.1 Seed Mixtures Recommended for Permanent Seedings

AREA	SEED MIXTURE (TABLE A.2)
BORROW AREAS, ROADSIDES, DIKES, LEVEES, POND BANKS AND OTHER SLOPES AND BANKS	
Well or excessively drained soils*	1,2,3,4,5 or 8
Somewhat poorly drained soils*	2
Variable drainage soil*	2
DRAINAGE DITCH AND CHANNEL BANKS	
Well or excessively drained soils*	,2,3 or 4
Somewhat poorly drained soils*	2
Variable drainage soil *	2
DIVERSIONS	
Well or excessively drained soils*	2,3 or 4
Somewhat poorly drained soils*	2
Variable drainage soils*	2
EFFLUENT DISPOSAL	5 or 6
GULLIED AND ERODED AREAS	3,4,5,8,10,11 or 12
MINESPOIL & WASTE, AND OTHER SOIL BANKS	
(If toxic substances & physical properties not limiting)	15,16,17 or 18
FRESHWATER SHORELINES (Fluctuating water levels)	5 or 6
SKI SLOPES	4 or 10
SOD WATERWAYS AND SPILLWAYS	1,2,3,4,6, 7, or 8
GENERAL RECREATION SEEDINGS	
PICNIC AND PLAYGROUNDS OR DRIVING AND ARCHERY RANGES, NATURE TRAILS (Not shaded)	1,2, or 23
CAMPING AND PARKING, NATURE TRAILS (Shaded)	19,20,21 or 23
SAND DUNES (Blowing sand)	24
WOODLAND ACCESS ROADS, SKID TRAILS AND LOG YARDING AREAS	9,10,16 or 22
LAWNS AND HIGH MAINTENANCE AREAS	1,19,20 or 21

*See county soil survey for drainage class. Soil surveys are available from the County Soil and Water Conservation District Office.

Source: U.S. Department of Agriculture, Soil Conservation Service.

RECOMMENDED VARIETIES

Generally, native species are preferred.

Creeping red fescue (Pennlawn, Ensylva, Wintergreen)

Tall fescue (Kentucky 31)

Coastal panicgrass (Atlantic)

Little bluestem (Blaze, Aldous, Camper)

Crownvetch (Chemung, Penngift)

Cape Caucasian bluestem (Caucasian)

Flat Pea (Lathco)

Winter Rye (Aroostook inland, Wintergraze coastal)

Reed canarygrass (Palaton, Venture) may be invasive in some areas

Birdsfoot trefoil (Empire)

Switchgrass (Blackwell, Shelter)

Big bluestem (Niagra)

American beachgrass

Prennial ryegrass (Norlea, Manhattan)

Deertongue (Tioga)

Table A.2 Grass Type for Seed Mixtures

N0.	Seed Mixture	Lbs/Acre	Lbs/1,000 Sq. Ft.
1.	Kentucky Bluegrass	20	.46
	Creeping red fescue	20	.46
	Perennial ryegrass	5	.11
	Total	45	1.03
2.	Creeping red fescue	20	.46
	Redtop	2	.05
	Tall fescue	20	.46
	Total	42	.97
3.	Creeping red fescue	20	.46
	Birdsfoot trefoil ^{1/}	8	.18
	Tall fescue	20	.46
	Total	48	1.10
4.	Creeping red fescue	20	.46
	Redtop	2	.05
	Birdsfoot trefoil ^{1/}	8	.18
	Total	30	.69
5.	Reed Canary Grass	20	.46
	Redtop	5	.11
	Total	25	.57
6.	Reed canary grass	15	.34
	Redtop	5	.11
	Birdsfoot trefoil ^{1/}	10	.23
	Total	30	.68
7.	Tall Fescue	15	.34
	Perennial ryegrass	5	.11
	Birdsfoot trefoil ^{1/}	10	.23
	Total	30	.68
8.	Switchgrass	10 (PLS) ^{2/}	.23
	Weeping lovegrass	3	.07
	Little bluestem	10 (PLS) ^{2/}	.23
	Total	23	.53
9.	Creeping red fescue	10	.23
	Crownvetch ^{1/} or	15	.34
	Flat pea	(30)	(.69)
	Tall fescue	15	.34
	Redtop	2	.05
	Total	42 - (57)	.96 - (1.31)
10.	Creeping red fescue	20	.45
	Redtop	2	.05
	Crownvetch ^{1/} or	15	.34
	Flat pea	(30)	(.69)
	Total	37 - (52)	.85 - (1.20)
11.	Birdsfoot trefoil ^{1/}	8	.18
	Crownvetch ^{1/}	15	.34
	Creeping red fescue	20	.46
	Total	43	.98

Table A.2 Grass Type for Seed Mixtures (cont.)

N0.	Seed Mixture	Lbs/Acre	Lbs/1,000 Sq. Ft.
12.	Tall fescue	15	.34
	Switchgrass	10 (PLS) ^{2/}	.23
	Perennial ryegrass	5	.11
	Crownvetch ^{1/}	15	.34
	Total	45	1.02
13.	Crownvetch ^{1/} or	10	.23
	Flat Pea	(30)	(.69)
	Switchgrass	5 (PLS) ^{2/}	.11
	Perennial ryegrass	5	.11
	Total	20 - (4)	.45 - (.91)
14.	Crownvetch ^{1/} or	15	.34
	Flat Pea	(30)	(.69)
	Perennial ryegrass	10	.23
	Total	25 - (40)	.57 - (1.03)
15.	Switchgrass	2 (PLS) ^{2/}	.05
	Big Bluestem	4 (PLS) ^{2/}	.09
	Coastal Panicgrass	2 (PLS) ^{2/}	.05
	Caucasian bluestem	2 (PLS) ^{2/}	.05
	Little Bluestem	2 (PLS) ^{2/}	.05
	Total	12	.29
16.	Tall fescue	20	.46
	Flat Pea	30	.69
	Total	50	1.15
17.	Deertongue	10 (PLS) ^{2/}	.23
	Birdsfoot trefoil ^{1/}	8	.18
	Perennial ryegrass	3	.07
	Total	21	.48
18.	Deertongue	10 (PLS) ^{2/}	.23
	Crownvetch ^{1/}	15	.34
	Perennial ryegrass	3	.07
	Total	28	.64
SHADY SITES			
19.	Creeping red fescue	50	1.15
	Canada bluegrass or	50	1.15
	Kentucky bluegrass		
	Total	100	2.30
20.	Creeping red fescue	100	2.30
21.	Creeping red fescue	50	1.15
	Tall fescue	30	.69
	Total	80	1.84
22.	Creeping red fescue	20	.46
	Flat Pea	30	.69
	Total	50	1.15
23.	Tall fescue	150	3.44

^{1/} Inoculate legume seeds, use four times recommended rate of inoculante when hydroseeding.

^{2/} Pure Live Seed (PLS): Warm season grass seed is sold and planted on the basis of pure live seed. An adjustment is made to the bulk pounds of seed to compensate for inert material and dead seed.

TABLE A-3 TEMPORARY SEEDING (from USDA Soil Conservation services)

<u>SEED</u>	<u>Lb/Ac</u>	<u>Lb/ 1,000SF</u>	<u>Recommended Seeding Dates</u>	<u>Remarks</u>
Winter Rye	112	2.6	8/15-10/1	Good for fall seeding. Select a hardy specie such as Aroostook Rye
Oats	80	1.8	4/1-7/1 8/15-9/15	Best for spring seeding. Early fall seedings will die with the winter but mulch will provide protection.
Annual Ryegrass	40	0.9	4/1-7/1	Grows quickly but is of short duration. Use where appearance is important. With mulch, seeding may be done throughout growing season.
Sudangrass	40	0.9	5/15-8/15	Good growth during periods of hot weather.
Perennial	40	0.9	8/15-9/15	Good cover, longer lasting than annual Ryegrass. Mulching will allow seeding throughout growing season.
Temporary mulch with/out without seeding			0/1-4/1	Refer to TEMPORARY MULCHING BMP and PERMANENT VEGETATION BMP

Tree and Shrub Species

Primarily for cover on sand and gravel sites: Bristly locust, rugosa rose, seabuckthorn, and common juniper. Of these, bristly locust is the best where rapid spread and development is needed to provide cover on steep banks or gullies. Rugosa rose is non-native and may not be recommended and seabuckthorn spread readily and may be invasive. The most vigorous is the bristly locust. Sweetfern can be used, if local transplant material is available. Overseeding shrub plantings with perennial ryegrass at 10 to 15 pounds per acre will provide some protection against erosion while the shrub planting is developing. Spacing of shrubs should be 4 feet x 4 feet, or 4 feet x 6 feet.

Primarily for wildlife food and cover: Use any of the above plants or crabapples, red osier dogwood, highbrush cranberry, sumac species, thornapple, and mountain ash.

Primarily for screening: Eastern red cedar, crabapples, European and Japanese larch, American arborvitea, red spruce, white spruce, Norway spruce, red pine and jack pine.

Note: Avoid exotic invasive species including Autumn Olive, Russian Olive and Honeysuckle.